

CLAIMS:

I Claim:

1. A vent for a duct terminating proximate a wall,
comprising:

5 a first member adapted to be connectable to the wall in
engagement with the duct;

a second member rotatably connected to said first member and
adapted to be arranged in front of the wall; and

10 at least one flap pivotally mounted to said second member
such that upon rotation of said second member relative to said
first member, a pivot axis of each of said at least one flap is
adjusted.

2. The vent of claim 1, wherein said first member is a
mounting flange including attachment means for enabling
15 attachment of said mounting flange to at least one of the wall
and the duct.

3. The vent of claim 1, wherein said second member is a
trim flange and said at least one flap comprises a plurality of
flaps.

20 4. The vent of claim 1, wherein said second member
includes connecting means for rotatably connecting said second

member to said first member.

5. The vent of claim 4, wherein said first member includes a cylindrical wall adapted to be coaxial with the duct and said second member includes a cylindrical wall arranged within said cylindrical wall of said first member, said connecting means comprising flexible snap fingers arranged on said cylindrical wall of said second member to engage with said cylindrical wall of said first member.

6. The vent of claim 1, wherein said first member includes an annular portion adapted to abut an outer surface of the wall and a cylindrical wall adapted to be coaxial with the duct, said second member including a cylindrical wall arranged within said cylindrical wall of said first member.

7. The vent of claim 1, wherein said second member includes a cylindrical wall adapted to be arranged partially in the duct, an annular portion extending from an outer edge of said cylindrical wall and abutting said first member and a rim surrounding said annular portion.

8. The vent of claim 7, wherein said at least one flap comprises a plurality of flaps, said rim includes a plurality of

pairs of opposite recesses arranged such that a line extending through each of said pairs of recesses is parallel to a line extending through other of said pairs of recesses, said flaps being rotatably mounted in said recesses.

5 9. The vent of claim 8, wherein each of said flaps includes a planar body and a pair of opposed projections arranged in a respective one of said pairs of recesses, said projections being rotatable in said recesses to thereby enable said flaps to pivot outward relative to said second member about said
10 projections.

10. The vent of claim 1, wherein said second member is a cover member defining an interior in which said at least one flap is pivotable and including openings for air flow from an interior of said cover member to an exterior of said cover member.

15 11. The vent of claim 10, further comprising connecting means for rotatably connecting said cover member to said first member.

12. The vent of claim 11, wherein said first member includes a rim at an outer periphery and said cover member
20 includes a rim connectable with said rim of said cover member,

...
said connecting means comprising flexible snap fingers arranged
on said rim of said first member.

13. The vent of claim 12, wherein said snap fingers consist
of three snap fingers spaced equiangularly around said rim of
5 said first member.

14. The vent of claim 10, wherein said first member
includes an annular wall adapted to be positioned against an
outer surface of the wall, an engagement portion adapted to
engage with the duct, and a rim connectable with said cover
10 member.

15. The vent of claim 10, wherein said cover member
includes mounting brackets for mounting said at least one flap.

16. The vent of claim 10, wherein said at least one flap
consists of a single flap, said single flap including a rim on a
15 rear surface arranged to abut said first member and thereby
provide the vent with a closed state.

17. The vent of claim 10, wherein said at least one flap
comprises a plurality of flaps.

18. The vent of claim 17, wherein said first member includes a cylindrical wall, said flaps being arranged to abut said cylindrical wall and thereby provide the vent with a closed state.

5 19. A vent for a duct terminating proximate a wall, comprising:

a mounting flange adapted to be connectable to the wall in engagement with the duct;

a sleeve member rotatably connected to said mounting flange;

10 a lint grill connected to said sleeve member and adapted to extend across the opening of the duct;

a flap plate frame pressed against the wall by said sleeve member such that said flap plate frame is rotatable relative to said sleeve member until said sleeve member is tightly engaged
15 with said mounting flange; and

a flap pivotally mounted to said flap plate frame such that upon rotation of said flap plate frame prior to tight engagement of said sleeve member with said mounting flange, a pivot axis of said flap is adjustable.

20 20. The vent of claim 19, wherein said mounting flange includes an annular portion adapted to be positioned against an inner surface of the wall, and a cylindrical wall extending to

both sides of said annular portion, said cylindrical wall being arranged to fit within the opening of the duct.

21. The vent of claim 19, further comprising connecting means for removably connecting said sleeve member to said mounting flange.

22. The vent of claim 21, wherein said mounting flange includes a cylindrical wall, said connecting means comprising threads formed on an inner surface of said cylindrical wall of said mounting flange and on an outer surface of said sleeve member.

23. The vent of claim 19, wherein said lint grill is removably connected to said sleeve member.

24. The vent of claim 19, wherein said lint grill and said sleeve member are formed as an integral unit.

25. The vent of claim 19, wherein said sleeve member includes a circumferential raised portion formed on an inner surface, said lint grill including flexible snap fingers for engaging with said raised portion of said sleeve member, said sleeve member including a pair of anti-rotation lugs arranged on

both sides of each of said snap fingers to prevent rotation of the lint grill relative to said sleeve member.

26. The vent of claim 19, wherein said sleeve member includes a peripheral, outwardly directed rim formed at a front edge and said flap plate frame includes an annular seat for receiving said peripheral rim such that said seat is pressed by said rim against the wall upon rotation of said sleeve member into said mounting flange.

27. The vent of claim 19, wherein said flap plate frame includes a pair of opposed walls defining a cavity, an aperture being formed in each of said walls, and said flap includes a mounting portion with at least one aperture therein, further comprising a pin extending through said apertures in said walls of said flap plate frame and said at least one aperture of said mounting portion of said flap and defining the pivot axis of said flap.

28. The vent of claim 19, wherein said flap plate frame is substantially rectangular and defines a rectangular depression, said flap being substantially rectangular and being mounted in said depression.

29. The vent of claim 19, wherein said flap plate frame includes opposed walls defining a depression, each of said walls including an apertures, said flap including projections on lateral sides and which are positioned in said apertures in said walls to thereby pivotally mount said flap to said flap plate frame.

30. A vent for a duct terminating proximate a wall, comprising:

a mounting flange adapted to be engaged with the duct;

10 a trim flange engaged with said mounting flange and adapted to be arranged at least partially in front of the wall, said trim flange including at least one disc portion having openings; and

15 a rotary disc rotatably mounted to each of said at least one disc portion of said trim flange and including openings, said rotary disc being rotatable relative to said trim flange to vary correspondence between said openings in said rotary disc and said openings in said at least one disc portion of said trim flange and thereby vary flow through said vent.

31. The vent of claim 30, further comprising a one-way washer adapted to be positioned on an inner side of the wall, said mounting flange being arranged to pass through said washer from an outer side of the wall and engage with said washer such

that said washer retains said mounting flange in connection with the wall.

32. The vent of claim 31, wherein said washer comprises an annular portion and fingers extending inward from said annular portion, said mounting flange engaging with said fingers.

33. The vent of claim 30, wherein said mounting flange includes a cylindrical wall adapted to be coaxial with the duct, said trim flange including a cylindrical wall arranged in said cylindrical wall of said mounting flange and engagement means for engaging said trim flange with said mounting flange.

34. The vent of claim 33, wherein said engagement means comprise a center axle, spokes extending inward from a rear, peripheral edge of said cylindrical wall to said center axle and a spring arm attached to each spoke and arranged in engagement with said cylindrical wall of said mounting flange when said trim flange is engaged with said mounting flange.

35. The vent of claim 30, wherein said rotary disc includes a cylindrical rim, a disc portion extending from a rear edge of said rim and a plurality of parallel vanes extending across a space defined by said rim, said disc portion of said rotary disc

including said openings.

36. The vent of claim 30, further comprising attachment means for attaching said rotary disc to said trim flange.

37. The vent of claim 30, said trim flange includes an annular wall and said mounting flange includes an annular wall, further comprising a foam rubber ring arranged between said annular wall of said trim flange and said annular wall of said mounting flange when said trim flange is engaged with said mounting flange.

38. A vent for a duct terminating proximate a wall, comprising:

a mounting flange adapted to be engaged with the duct, said mounting flange including a plurality of disc portions each having openings; and

a plurality of rotary discs each rotatably mounted to a respective one of said disc portions of said mounting flange and including openings, said rotary discs being rotatable relative to said mounting flange to vary correspondence between said openings in said rotary discs and said openings in said disc portions of said mounting flange and thereby vary flow through said vent.

39. The vent of claim 38, wherein said trim flange has a substantially rectangular shape and said plurality of disc portions consists of two disc portions.

5 40. The vent of claim 39, wherein said mounting flange includes inner walls adapted to engage with the duct, a face plate perpendicular to said inner walls and rim walls extending rearward from peripheral edges of said face plate, said face plate including said two disc portions.